AMENDMENTS TO THE CLAIMS

1 (currently amended) A frame generatingsynchronization method comprising:

inserting a synchronous word into data at a position determined based on a noise cycle of a transmission line in order to generate a frame; and

composing data and a synchronous word to generate a frame;

transmitting the generated frame from a transmitter to a receiver via thea transmission line.5

wherein said composing the data and the synchronous word arranges the synchronous word based on noise cycle of the transmission line.

- 2 (currently amended) A frame generatingsynchronization method as recited in claim 1, wherein said positionthe synchronous word is arranged according to a predetermined arrangement algorithm.
- 3 (currently amended) A frame generating synchronization method as recited in claim 2, wherein a parameter of the predetermined arrangement algorithm comprises at least one of <u>a</u> length of the synchronous word and an arrangement interval of the synchronous word.
- 4 (currently amended) A frame generating synchronization method as recited in claim 31, wherein the length of the synchronous word is approximately almost equal to a multiple of athe length of a multiple of the noise cycle by a natural number.
- 5 (currently amended) A frame generating synchronization method comprising:

 inserting a plurality of synchronous words into data at a position determined based on a noise cycle of a transmission line in order to generate a frame; and composing data and a plurality of synchronous words to generate a frame; transmitting the generated frame from a transmitter to a receiver via thea transmission line.

wherein said composing the data and the plurality of synchronous words arranges the plurality of synchronous words based on noise cycle of the transmission line.

6 (currently amended) A frame generating synchronization method as recited in claim 5, wherein said inserting a plurality of synchronous words into data composing the data and the synchronous words arranges the plurality of synchronous words over a section of frame as long as the noise cycle.

7 (currently amended) A frame generating synchronization method as recited in claim 5, wherein athe length of an arrangement interval of at least two one pair of the plurality of synchronous words is different from athe length of the noise cycle.

8 (currently amended) A frame generatingsynchronization method as recited in claim 5, wherein at least twoone pair of the plurality of synchronous words are arranged using the same pattern.

9 (currently amended) A frame generating synchronization method as recited in claim 1, wherein athe length of the noise cycle is the length of a time interval whose noise level in the transmission line is beyond a predetermined threshold.